



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

OCT 26 2009

Ramiro Villalvazo
Forest Supervisor
Eldorado National Forest
100 Forni Road
Placerville, CA 95667

Subject: Draft Environmental Impact Statement (DEIS) Freds Fire Reforestation, El Dorado County, CA (CEQ# 20090313)

Dear Mr. Villalvazo,

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The proposed action would take place on 3,320 acres in the Eldorado National Forest. The preferred alternative (Alternative 1) proposes to reestablish a forested landscape, control or eradicate invasive plant species using herbicides, reduce fuel, and restore spotted owl travel corridors.

Based on our review, we have rated the DEIS as Environmental Concerns - Insufficient Information (EC-2). We commend the Forest Service on a thorough analysis of pesticide risk; but we have identified a source of toxicity data that should be useful, and suggest an additional comparison. Our other concerns include future herbicide limitations, clarification of herbicide use, and climate change. Please see the enclosed Detailed Comments for a description of our concerns and recommendations. A *Summary of EPA Rating Definitions* is also enclosed.

We appreciate the opportunity to review this document. We are available to discuss our comments. If you have any questions, please contact Tom Kelly, the lead reviewer for this project, at 415-972-3856 or kelly.thomasp@epa.gov, or me at (415) 972-3521.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathleen M. Goforth".

Kathleen M. Goforth, Manager
Environmental Review Office

Enclosures:
Summary of EPA Rating Definitions
Detailed Comments

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) FOR FRED'S FIRE REFORESTATION, EL DORADO COUNTY, CA, OCTOBER 26, 2009

Additional Aquatic Toxicity Data and Analysis

Improve Aquatic Toxicity Data. The 50% lethal concentration (LC50) levels in Table 3-30 and 3-31 do not appear comprehensive. The Forest Service should review EPA's ECOTOX database (<http://cfpub.epa.gov/ecotox/>) for aquatic toxicity values. For example, ECOTOX contains over 1300 acute and chronic toxicity values for nonylphenol for a wide range of plant, vertebrate and invertebrate species. The Forest Service should evaluate the most appropriate values for comparison to the expected concentrations based on Water Contamination Rates shown in Tables 3-17a and 3-17b.

Recommendation:

The FEIS should review the ECOTOX database for additional toxicity data for herbicides, surfactants and additives, and compare appropriate toxicity data with water contamination rates.

Future Herbicide Limitations

Review potential future herbicide use limitations posted by EPA. Although the project concludes that no federally threatened, endangered or proposed species or their habitat would be impacted (pg. 197), the Forest Service should be aware that EPA continues to conduct consultations on effects of pesticides to listed species. EPA has completed assessment of effects to certain species from uses of glyphosate, hexazinone, and triclopyr. Results of these effect determinations/ consultations can be found at <http://www.epa.gov/oppfead1/endanger/litstatus/effects/>. EPA may require future use limitations as a result of these ESA consultations. If required, these limitations would be implemented through pesticide product labels.

Recommendation:

The Forest Service should review EPA's website (<http://www.epa.gov/oppfead1/endanger/litstatus/effects/>) to ensure additional limitations have not been placed on pesticides planned for use.

Clarification of Herbicide Use

Clarify Comparison of Alternatives Table. The (unnumbered) Comparison of Alternatives Table, on page xvii, states the following short term impacts: "Herbicides (and surfactants and additives) may reach streams under several worse-case scenarios. These concentrations would be below Maximum Contaminant Levels for humans." However, Maximum Contaminant Levels do not exist for many of the pesticides, surfactants and additives evaluated. Instead, the Forest Service used hazard quotients derived from estimated concentrations and reference doses to estimate herbicide, surfactants and additive risk (e.g. Table 3-19a-2). While EPA supports this approach, we recommend the Comparison of Alternatives Table more accurately reflect the discussion of the DEIS.

State the EPA Registration Number of any products anticipated to be used for the project. Forest Service proposes to apply several types of herbicide, which include glyphosate, triclopyr, hexazinone, clopyralid and chlorosulfuron, to competing vegetation on approximately 3,200 acres within the Freds Fire area to hasten the development of a structurally diverse conifer forest.

Recommendation:

The FEIS should state the EPA Registration Number of any products anticipated to be used for the project. The pesticides used must be registered with EPA and the California Department of Pesticide Regulation and used according to the label directions and Federal and State pesticide laws (Executive Order 12088). Since the regulatory status of chemicals can change, a review of the current status of all herbicides considered for use should be conducted prior to each application season.

Climate Change

Describe climate change and its effects on forest management practices, habitat, and biodiversity. It is believed significant changes in weather patterns could have important implications for how we manage our forests. Currently, research indicates that climate change could impact California's forests through changes in water supply, timing of snowmelt runoff, and distribution of wildlife, vegetation, and harmful timber insects and diseases; by increasing the length and severity of the fire season; and by altering the growth rates of forest trees and vegetation. The California Climate Action Team recently released a report¹ on the impacts of climate change to California, the latest research, and State efforts to adapt to impacts. The report estimates that the long-term risks of large wildfires in California are substantial, with increases in occurrences statewide ranging from 58% to 128% in 2085.

Recommendation:

We recommend the FEIS include a detailed description of climate change and its implications for effective management of forest resources and the ability to meet requirements of the Forest Land and Resources Management Plan. For example, describe and evaluate projected climate change consequences, such as frequency of high intensity storms, amplified rain events, and the severity and frequency of insect outbreaks, droughts, and fire seasons, and their effects on the success of reforestation efforts and adaptive forest management.

¹ Draft 2009 Climate Action Team Biennial Report to the Governor and Legislature. See web page: <http://www.climatechange.ca.gov/publications/cat/index.html>.